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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,359	03/09/2004	Stephen Boyer	909A.0156.U1(US)	4348
29683	7590	06/25/2007		
HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212			EXAMINER SKOWRONEK, KARLHEINZ R	
			ART UNIT	PAPER NUMBER
			1631	
			MAIL DATE	DELIVERY MODE
			06/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/797,359	Applicant(s) BOYER ET AL.	
	Examiner Karlheinz R. Skowronek	Art Unit 1631	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 12 June 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_

  
**JOHN S. BRUSCA, Ph.D.**  
**PRIMARY EXAMINER**

KRS 6/14/2007

Continuation of 11. does NOT place the application in condition for allowance because: Regarding the rejection of claims 1, 4, 7, 9-15, 19, 22, 25, 27-33, 35, 37 and 40 under 35 USC102(b).

Applicant argues the Garfield reference does not teach the limitations of independent claim 1. The argument is not persuasive and the rejection is maintained for reasons of record.

Applicant argues that Garfield does not teach the extraction of information. This is not persuasive because Garfield teaches the extraction information from punched cards.

Applicant argues impermissible hindsight was used to in the application of the Garfield reference. The use of impermissible hindsight is not relevant in a rejection under 35USC102 and is only relevant in a rejection under 35 USC 103.

Applicant argues that Garfield does not teach "searching the index by a combination of at least one fragment name and connectivity. This is not persuasive because Garfield teaches as cited above using the parsed expression of a chemical name to perform a search (p. 466, Relationship Between Nomenclature and Searching). The example given by Garfield on p. 466, paragraph 4 shows a combination fragment names and connectivity, e.g. hex, fragment connectivity of six carbon chain, and of fragment name for alcohol.

Applicant argues that Garfield does not teach a dictionary of stop words. This is not persuasive because Garfield teaches in the last sentence of paragraph 2, p. 487, that the presence of an ignorable character will always indicated the beginning or ending of a portion of the name which can be processed independently. Ignorable characters reads on stop words. The comparison of characters to a list of ignorable characters (reading on stop words) reads on the limitations of filtering recognized chemical name fragments and the application of regular expressions. The parenthesis is used in the regular expression as are other characters that used to parse the extracted text into the alpha storage area taught by Garfield (p. 487, paragraph 2)

Applicant argues that Garfield does not teach characters being maintained or removed as a function of context. This is not persuasive because Garfield teaches that the ignorable (stop word) characters are determined in the context of the text being analyzed (p. 487, paragraph 2) reading on removal of characters.

The method outlined by Garfield effects to store the extracted key words in association with structural information in a searchable index as is taught on p. 453, 4th paragraph sent 1-2. Page 479 shows key words in association with structural meanings in a searchable index.

Regarding the rejection of claims 6, 24, and 42 under 35USC103(a) as being unpatentable over Garfield in view of Hull et al. While Garfield teaches the storage of extracted key words in association with structural information as in the currently amended claims, Garfield does not explicitly teach the identification of at least one document that contains a reference to a corresponding chemical compound at the intersection of text and structural databases. Hull et al. cure the deficiencies of Garfield by teaching the computer generation of chemical and textual descriptors reading on chemical connectivity and keywords. Hull et al. teach the textual descriptors originate from a collection of documents (col. 9, lines 16-23). Hull et al. teach further that the textual descriptors ("keywords") also include textual representation of chemical descriptors (col. 9, lines 23-25). Hull et al. list examples of documents that may serve as sources for the keywords (col. 9, line 25-27). The aforementioned steps highlight the teaching in Hull et al. reading on extraction of text from documents. Hull et al. teach the creation of two indices. The extracted text is stored in an index in which the columns of the index relate to a particular document, keywords, and chemical descriptors. Hull et al. teach the creation of a second index representing the compounds in the document (col. 9, line 53-60). Hull et al. teach searching the index with a keyword and a fragment connectivity (col. 10, line 56-57). Hull et al. teach that the search results at an intersection of the structure and text indices identifies a ranked list of documents related to a chemical compound (col. 11).

Regarding the rejection of claims 18 and 36 under 35USC103(a) as being unpatentable over Garfield in view of Kemp et al. Kemp et al. teach on p. 547, col. 1, paragraph 1 lines 2-8, "The first stage is tokenization of the text and includes the differentiation of chemical and non-chemical name fragments using the dictionaries just described. The second stage applies a series of heuristics in which the tokenized text is recombined and chemical names are delimited for subsequent use by the addition of SGML tags to the text". This reads on an initial step of tokenizing the document to provide a sequence of token.

Regarding the rejection of claims 5, 16, 23, 34, and 41 under 35USC103(a) as being unpatentable over Garfield in view of Dittmar et al. Dittmar et al. teach the construction of search queries on a graphics terminal reading on a graphic user interface (GUI) (p. 93, col. 1, paragraph 3, line 3-6). The query searches an index (screens) using fragment connectivity (p. 93, col. 1, paragraph 3, line 8-11; fig1 and 2). Regarding the teaching of the characters C, O, R, and N: Dittmar et al. teach R and C on p.98 col. 1, paragraph 3, line 4. Dittmar et al. teach O and N on p. 98 table IV.

Regarding the rejection of claims 8 and 26 under 35USC103(a) as being unpatentable over Garfield in view of Drefahl et al. Applicant has not provided traversal arguments regarding this rejection.

Regarding the rejection of claim 43 under 35USC103(a) as being unpatentable over Garfield in view of Shivarati et al. Applicant has not provided traversal arguments regarding this rejection.

Regarding the rejection of claim 44 under 35USC103(a) as being unpatentable over Garfield in view of Shivarati et al. and further in view of Leiter et al. Applicant has not provided traversal arguments regarding this rejection.

Regarding the rejection of claims 45 and 46 under 35USC103(a) as being unpatentable over Garfield in view of Shivarati et al. and further in view of Drefahl et al. Applicant has not provided traversal arguments regarding this rejection.